E.1.e

PROTECTION ENCY

August 15, 1983

Mr. George Dews
Hazardous Waste Section
Department of Environmental
Protection
State Office Building
165 Capitol Avenue
Hartford, Connecticut 06106

Dear George:

Enclosed is the Final Notice of Deficiency for Pratt & Whitney, 400 Main Street, East Hartford, Connecticut, as revised to include your comments. Please send me a copy of your cover letter when issued to the company.

Call me at (617)223-4448 if you have any questions.

Sincerely,

William R. Torrey, III
CT State Coordinator

cc: Ed Parker
Dick Boynton

EPA:IWM:SWPB:W.TORREY:pjs:3-4448:8/15/83:Disc F

	CONCURRENCES							
SYMBOL	1CWaste							
SURNAME	TORREY							
DATE	8/15/83							

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

GPO : 1983 O - 403-201

ATTACHMENT: Pratt & Whitney Aircraft
400 Main Street
East Hartford, Connecticut
EPA I.D. Number CTD990672081
Permit Application Notice of Deficiency

The following information outlines areas where the Pratt & Whitney permit application does not meet the requirements for a RCRA permit application given in 40 CFR Part 270 and refer to standards for hazardous waste management facilities in 40 CFR Part 264. Additional information is necessary in each of the following areas in order to begin a more technical review of Pratt & Whitney's RCRA permit application.

I. Revised Part A Dated 4/20/83

A. On page 3A, lines 21 - 26 and page 3B, lines 1 - 26 are summed to estimate 307 tons/yr. of various F & U waste organic compounds which will be incinerated. Since the incinerator operating conditions will be dictated by the most difficult burning waste, the company should seek to relatively quantify a percent of each waste type which might be incinerated during a given year to aid in selecting the principal organic hazardous constituents (POHC) of interest.

B. There seems to be inconsistencies in the process design capacity mentioned in the revised Part A, the Part B information and the closure plan. Please clarify and make consistent --

1. S01 - Storage in Containers

a. Revised Part A = 182,250 gallons

b. Part B

i. container storage bldg. on page 101:
1000 barrels @ 55 gal. = 55,000 gal.

ii. transporter storage pad on page 100:
30 transporters @ 375 gal. = 11,250 gal.

iii. barrel/transporter storage pad on page 101:
100 barrels @ 55 = 5,500 gal.
or
16 transporters @ 375 = 6,000 gal.

Therefore:
Total Part B Storage = 72,250 gal.

c. Closure Plan on Page 65: 55,000 gal.
Maximum Inventory - Barrel Storage

2. S02 - Storage in Tanks

   a. Revised Part A and; Part B on Page 104 - 8 tanks = 27,300 gal.

   b. Closure Plan on Page 65 Maximum Inventory - Tank Storage = 32,000 gal.

3. T03 - Liquid Injection Incinerator

   a. Revised Part A = 50 gal./hr.

   b. Part B - Page 111
   Maximum Waste Flow Rate = 47 gal./hr.

C. The earlier Part A's on file indicated a surface impoundment (S04). Please submit documentation as to why this process is not being addressed in the Part B application.

II. Facility Description

A. Topographic Map (§§270.14 - formerly 122.25(a)(19)(i-xii))

The submitted topographic map at page 75 does not completely satisfy the information requirements. The following must also be submitted:

1. North area of map along Rigley Street only shows approximately 400' around facility. Up to 1000' must be included, also include surrounding land uses; and

2. Include a wind rose;

3. Include location of any injection or withdrawal wells both on-site and off-site;

4. Include other structures; run-off control systems, storm, sanitary and process sewer systems, loading and unloading areas, fire control facilities;

5. Indicate the waste hauler traffic pattern and control; show turns across traffic lanes and stacking lanes if appropriate, show traffic control signals.

6. Indicate the location of the barrel/transporter pad near the concentrated waste treatment plant.

III. Waste Characteristics

A. Chemical and Physical Characteristics - (§§270.14 formerly 122.25 (a)(2) and 264.13)

The Company states the primary basis for characterization of waste will be the process information of known process solutions which are found to no longer meet operating specifications as determined by the material control laboratory. Since a process solution may be discarded for other reasons besides reduced strength, including spill clean-up or contamination with other materials, please detail a frequency of when analysis of chemical characteristics will be conducted to verify assumed process information.

Also, please identify the number of individual "Process Solutions" which "descriptions are contained in volumes of literature located near the treatment area." At this time, copies of those solutions specifications are not needed for submittal.

IV. Process Information

A. Containers - (§§ 270.15(a) - formerly 122.25(b)(1)(i)(A) and 264.171 - 177)

1. For barrels and transporters, please discuss how the company ensures compatibility of the waste with the container. Also are the barrels reused or new, and do they meet DOT specifications? Describe a transporter.

2. Container Management Practices

Include discussion on procedures used to ensure that hazardous waste containers are always kept closed except when adding or removing waste, and that they are stored, transported, opened, and handled in a manner that they do not rupture or leak.

Also, please provide figures drawn to scale of the plan for aisle space for the maximum planned inventory for the 3 storage areas.

Include sample computer reports which will be used to ensure the 1,000 drum maximum and the 350 maximum free-liquid drums is not exceeded.

3. Containment Systems

For all container storage areas, provide dimensions and calculations which support containment volumes shown in the application, in addition

a. Container Storage Building:

This building has 5 separate containment areas, however, the Part B is not clear on how the 350 free-liquid barrels maximum will be distributed among the 5 areas to ensure minimum 10% volume containment in each compartment.

b. Transporter Storage Pad

Similarly, this pad has 3 separate compartments, detail the individual volumes and arrangement of the 30 transporters in each compartment to verify 10% volume containment.

c. Barrel/Transporter Storage Pad

Describe how barrels and/or transporters are arranged on this pad. How are barrels kept away from contact with any accumulated liquids?

4. Incompatible Waste

Page 101 stated incompatible waste are stored in non-adjacent compartment, please clarify and state which compartments are used for which type of wastes to ensure no incompatible waste mixing if leaks occur.

B. Tanks - (§§ 270.16 formerly 122.25(b)(2) and 264.191 - 199)

1. Description of Tanks

For the eight tanks listed on page 104, please designate for each: the specific design standard, tank age, construction materials, and liner if appropriate, actual shell thickness versus design thickness, subsurface and foundation construction. Note Page 6 states only 4 tanks are EPA regulated; however, please supply above information for all eight as required by DEP.

2. Tank Corrosion and Erosion (264.194(b))

The Company must develop a schedule and procedure for assessing the interior condition of all tanks.

On page 23, the Company plans to sample tank contents when tank is to be emptied. Please expand on this practice, specifically your procedures to ensure incompatible materials are not mixed or cause harm to tank materials (see 264.17(b)).

3. Page 104 notes secondary containment is provided for all storage tanks. Although this is not required under present Federal regulations, please provide the containment volume available for each tank, and how incompatible mixing is prevented. Also, please describe any liquid level indicators present or planned.

C. Incinerator (§§270.19 formerly 122.25(b)(5)(i) and 264.340 - 347)

1. Waste Analysis

The Company proposes to burn two distinct hazardous waste feeds; cyanide solutions and waste solvent/wax/still bottoms. The company must provide a more complete characterization of each feed. The CN- solutions should be analyzed to verify the lack of significant 40 CFR Part 261 Appendix VIII organics constituents.

The waste organic feed stream must be better defined to include an identification of any hazardous organic constituents listed in 40 CFR Part 261, Appendix VIII which are present in significant amounts (>100ppm) in the waste to be burned; and approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" or their equivalent (see §270.6 [formerly §122.20] for reference). Also, the application notes a future solvent recovery process addition which is likely to alter the future character of that feed to the incinerator, please discuss the company's plan to characterize that new waste stream to aid in selecting future POHC's.

Also, indicate whether the incinerator ash is a hazardous waste, and state the disposition of the material if hazardous.

2. Description of Incinerator

The Company has provided specification on the prime air mover, please describe the equipment used to continuously monitor and record the combustion gas velocity.

Similarly, the application states the waste feed rate is monitored, but please describe how the waste feed rate is recorded. The company states on page 119 an 1800°F feed shut-off temperature, however, sets a minimum operating temperature of 1832°F, please make consistent.

3. Test Schedule

The Company has not specified when the trial burn will be conducted.

4. Auxiliary Fuel

The Company has not specified an auxiliary fuel feed rate for each test burn.

5. Pollution Control Devices

Please designate the operational temperature for inlet gases to the packed tower scrubber, other than only "to protect the packing."

The application is not consistent on the planned operational pH of the scrubber solution, page 109 states 8.0-8.5 and pages 111 and 117 state 7.5-8.5, please make the application consistent.

Please provide model numbers of the Burn-Zol pollution control devices.

6. Other

It would be beneficial if the company could submit on incinerator/emissions-control system operations and maintenance manual which would contain a detailed description of procedures (including operational parameter ranges) the operator must follow for;

a) Start-up (Cold),

b) Shut-down

c) Emergency shut-down

d) Automatic shut-down

e) Re-starting (warm)

f) Normal operations

The manual should also include a plan for conducting "normal" maintenance procedures and periodic maintenance inspections of both systems (including monitoring devices). Operating records, maintenance records and inspection records should be retained by Pratt & Whitney for a minimum of two years and should be made available at the request of CT DEP.

The Company has provided very little information concerning their Continuous Emission Monitoring System (CO EEM). This system must successfully complete a performance specification test (PST) prior to the conduct of the Trial Burn.

The Company has indicated that the proper procedures will be used, however a detailed testing protocol (pretest report) must be submitted for review.

Also, a pretest conference will be required at least 10 days in advance of the test date. The conference should be held at the company site and attended by appropriate personnel from the company, its testing contractor, CT DEP and EPA as needed.

V. Contingency Plan - (§§270.14-formerly 122.25(a)(7) and 264.50-56)

Describe the Company procedures for ensuring that all emergency equipment listed in the plan is cleaned and fit for its intended use before operations are resumed following any incident requiring implementation of the contingency plan. Also, what inspections of this equipment are made to ensure its constant reliability?

Please provide a complete incinerator inspection checklist at p.32.

The plan does not describe the specific signal which will be given if evacuation is necessary.

VI. Personnel Training - (§§270.14-formerly 122.25(a)(2)) and 264.16)

The Company did not identify a Training Director (264.16(a)(2), and his/her qualifications.

Identify any "high hazard areas" in the plant and any special training for those in such an area.

VII. Closure Plan - (§§270.14-formerly 122.25(a)(13) and 264.112)

A. The Company did not estimate a date of closure.

B. The Company plans to take more than 180 days to complete closure, please justify per 264.113(a)&(b). Also, make the closure milestones consistent on page 65 (9 months, January thru September) and page 66 (one year for closure).

Upon closure, describe management of empty containers and transporters within section J(V) at page 70.

Please update closure cost estimate to May, 1983 on page 73.

VIII. Liability Insurance - (§§270.14-formerly 122.25(a)(17) and 264.147(a)(1)(i)

The Company provided an insurance policy for the proper amount of liability, however, the attached Hazardous Waste Facility Liability Endorsement does not follow the language required by 264.151(i), please resubmit the endorsement worded exactly as specified in §264.151(i).